



Houston Technology Center

*How to Overcome First Mover
DISadvantage*

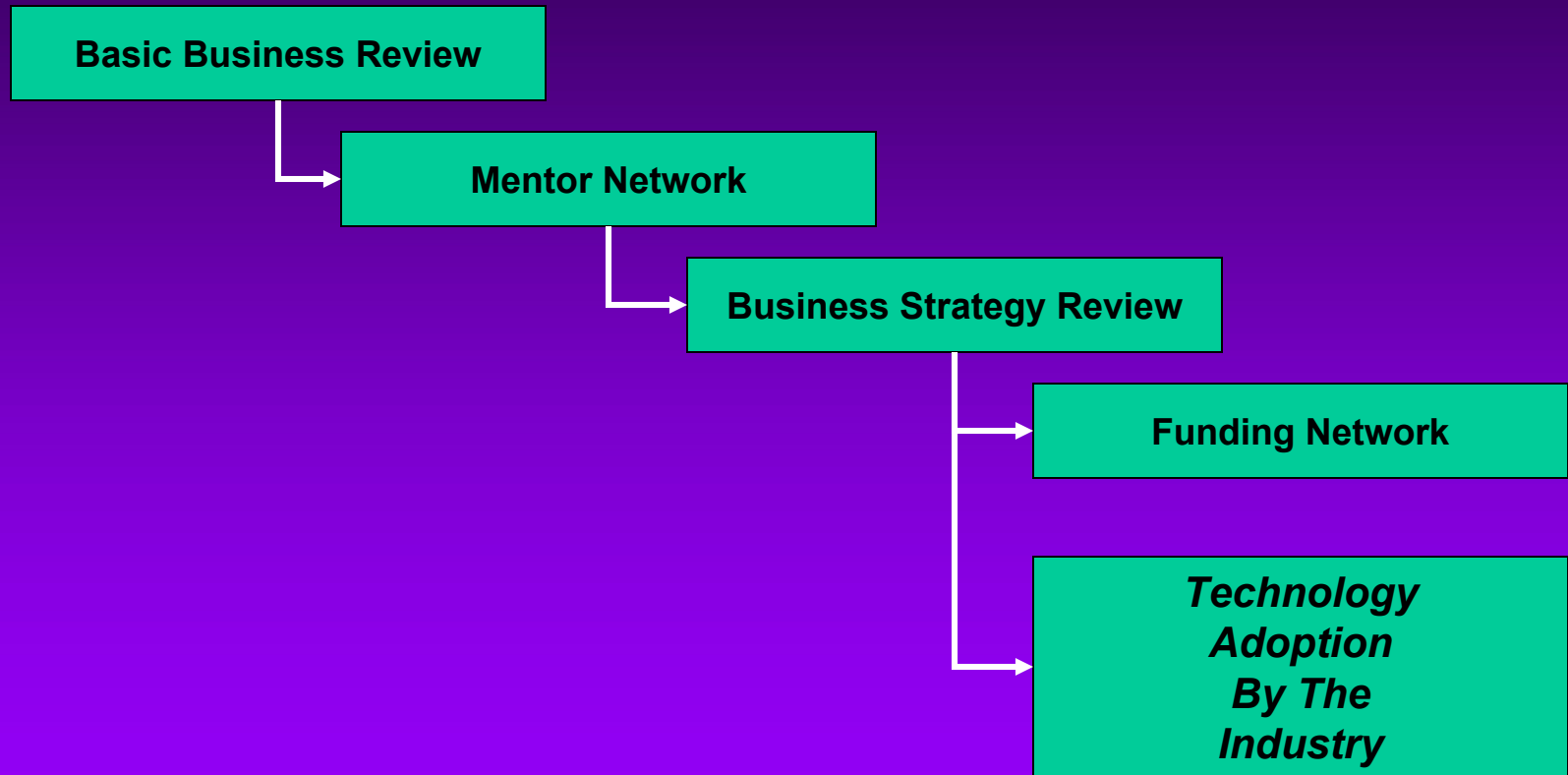


The Houston Technology Center

HTC is a non-profit business accelerator for Houston-based emerging technology companies

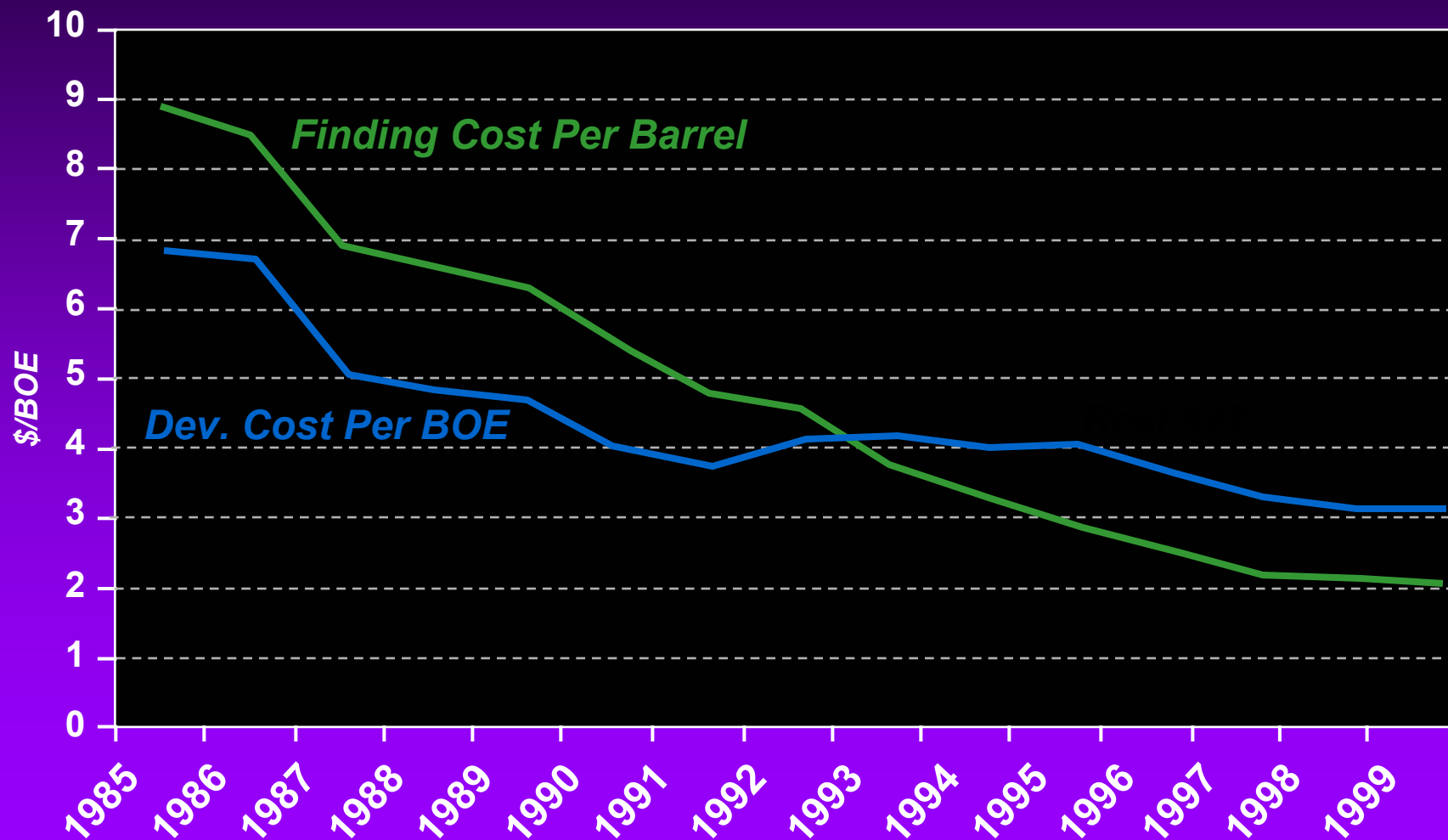
- ◆ Full-time staff to focus on early stage due diligence and support
- ◆ A network of 200 Mentors providing experienced advice
- ◆ 250 identified Service Provider Companies
- ◆ 100 Angel Investors looking for investment opportunities
- ◆ 70 Venture Capital Firms & Corporate Investors
- ◆ Network of Corporate customers

HTC is Involved Early



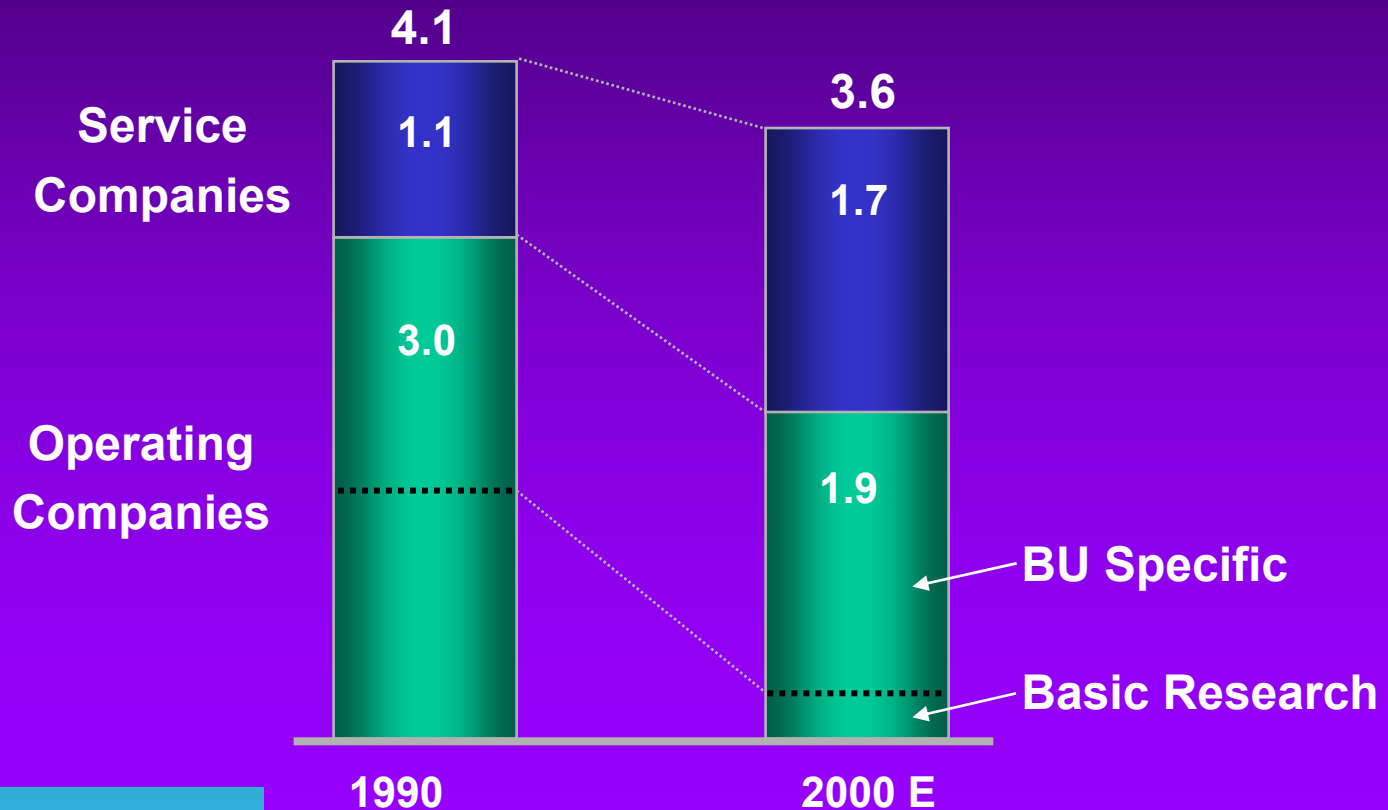
The market must determine the viability of a technology

Value of Technology



R&D is increasingly “outsourced”, and central funding has been reduced drastically

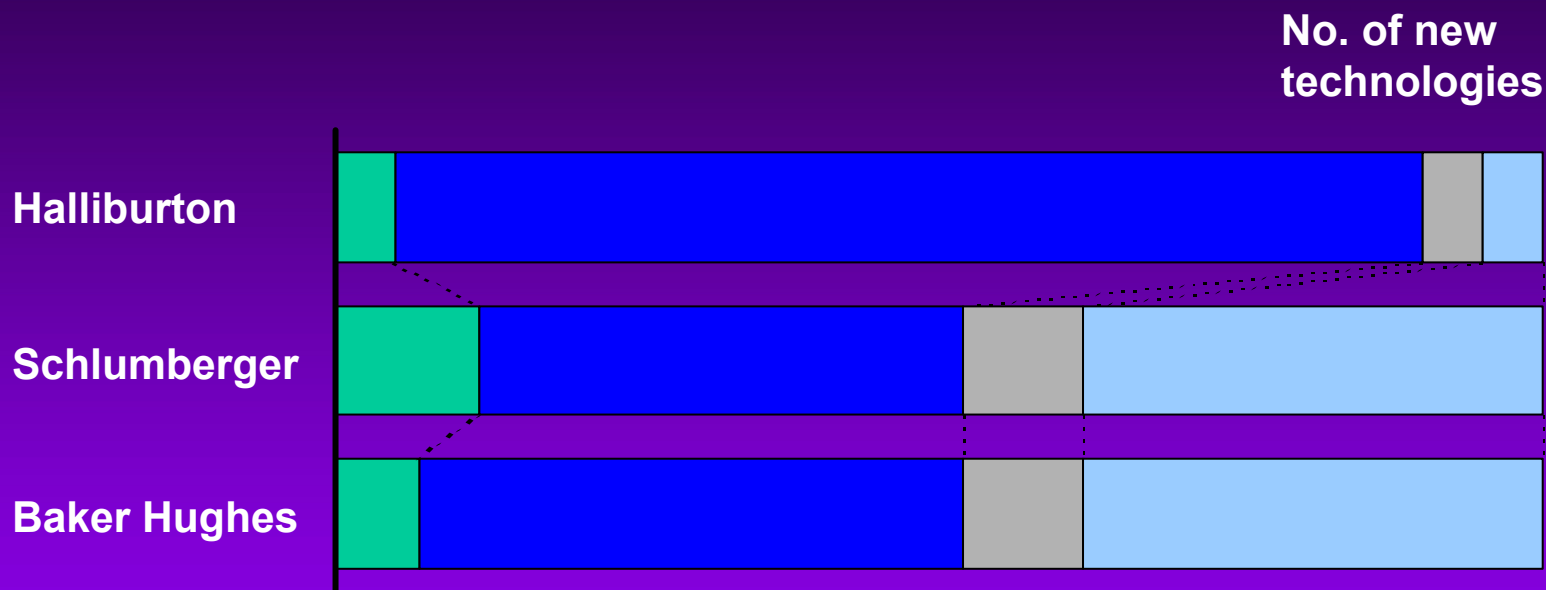
R&D funding in the E&P industry
Year 2000 US\$ (billions)



Source:

McKinsey & Company


The “Big 3” Oil Field Service Companies have primarily entered new technology markets through acquisitions



 In-house innovation*

 Acquired**

 Adaptor

 No role played

* "In-house innovation" is any innovation by OFSE before 1990 or an innovation by a division after 1990 that was part of the OFSE before 1990

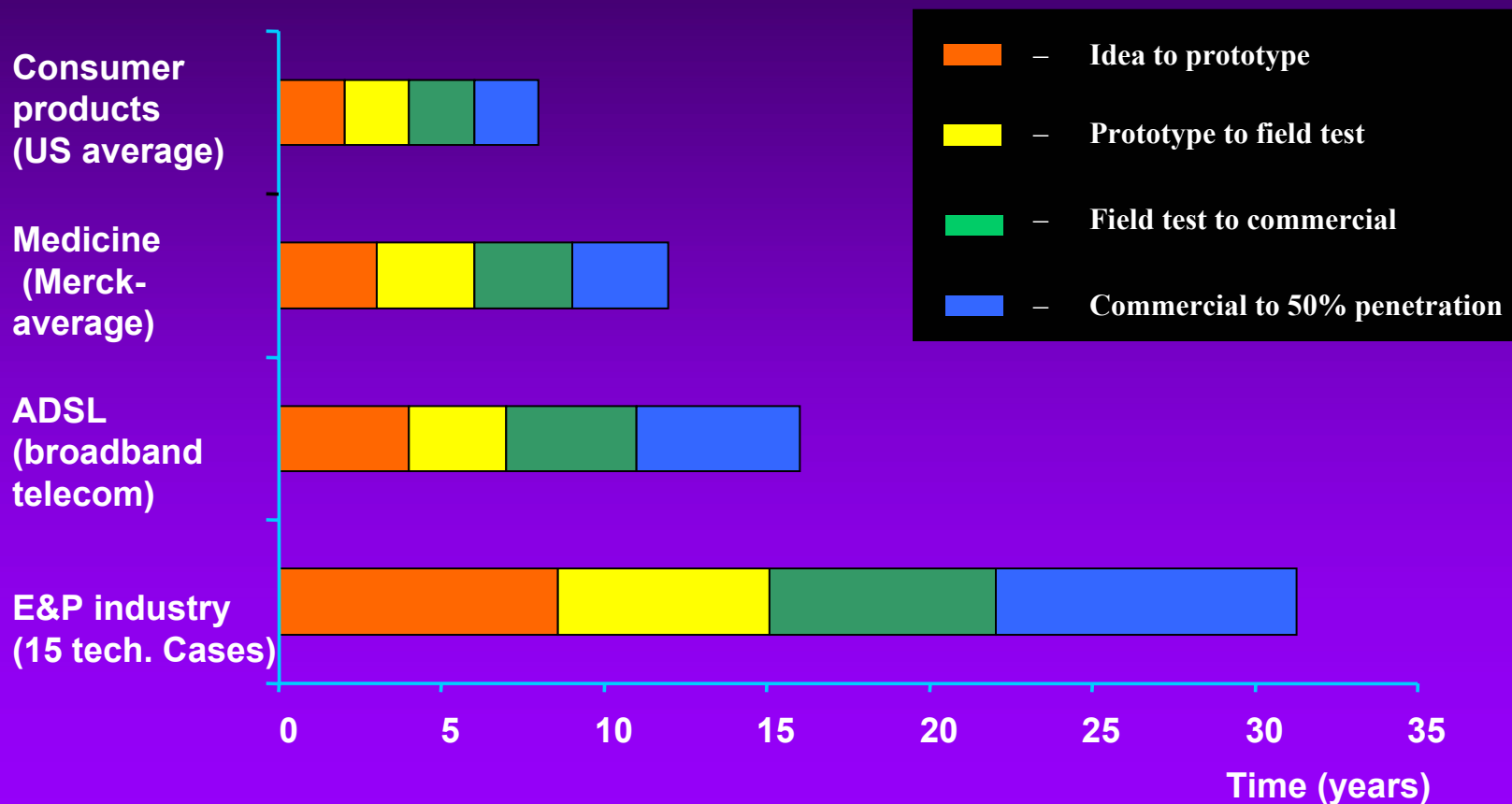
** "Acquired" innovation is any innovation that was acquired through an acquisition after 1990 or was developed by a division acquired after 1990

Source:

McKinsey & Company

The pace of innovation in E&P has been slow relative to that in other industries

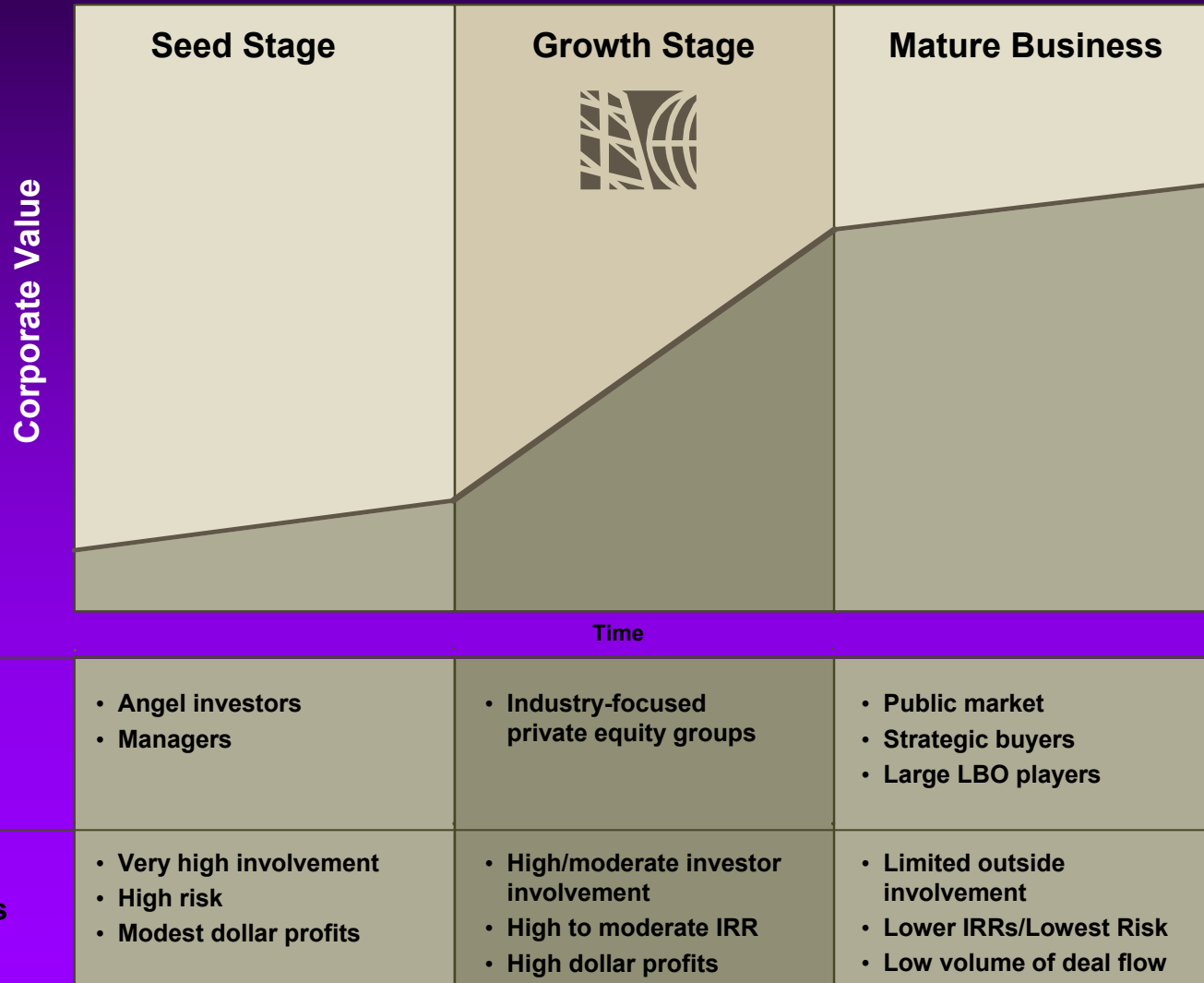
Average duration of the four phases in different industries



Source:

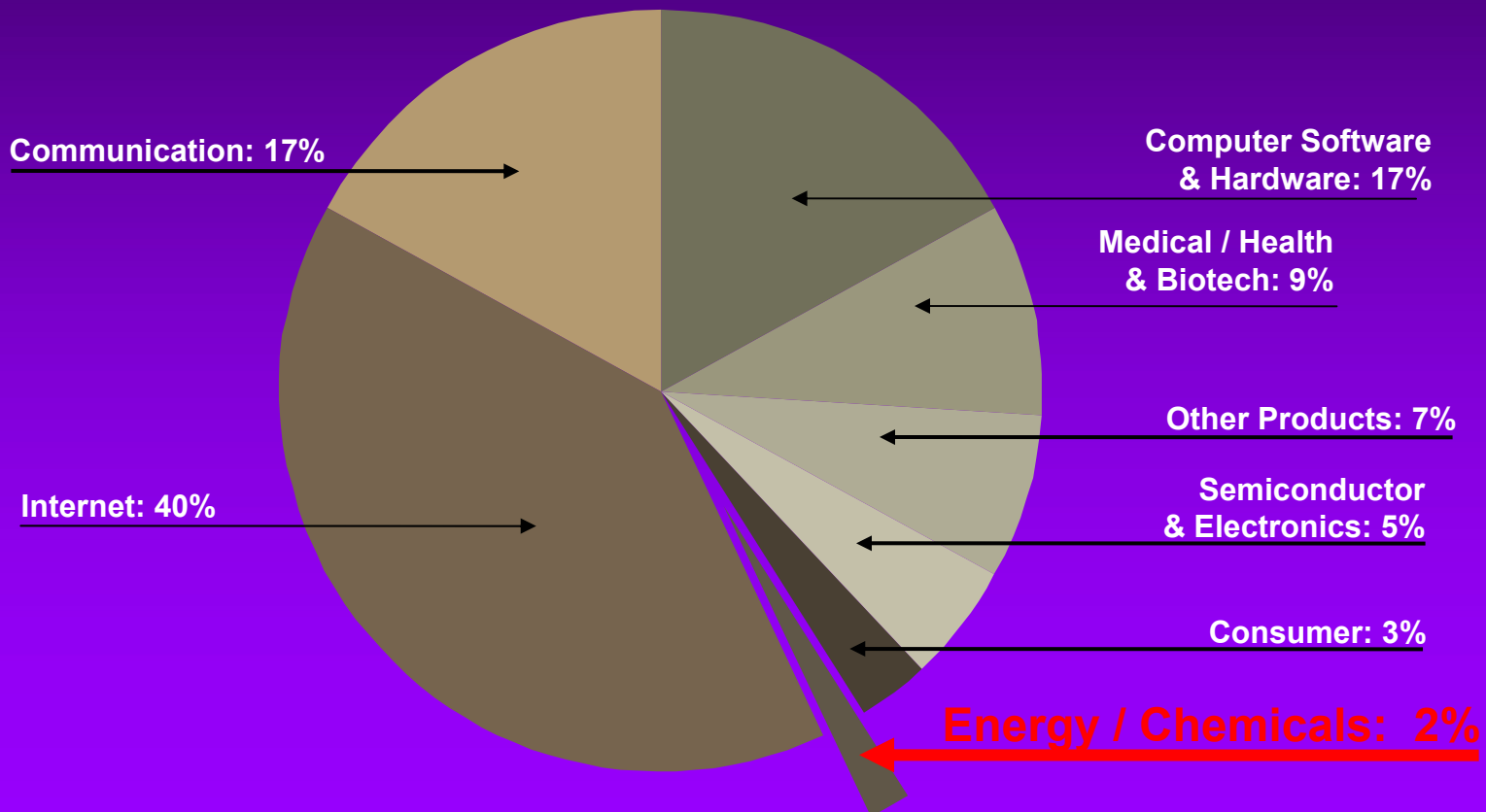
McKinsey & Company

Product Development Cycle



Private Equity Investment in the Energy Sector

U.S. venture capital and private equity disbursements 1997- 2000





The Energy Industry is Strategically Challenged

Commodity business

- ◆ Price takers
- ◆ Many economic tools are unavailable:
 - ◆ Differentiation
 - ◆ Total solution
 - ◆ Price discrimination
- ◆ Cyclic

The Strategically Reality

↪ Cost is Everything

↪ Cost is Everything

↪ Cost is Everything

Cost Focus has Obvious Manifestations

- ◆ Little slack in the organization
- ◆ Key roles missing
- ◆ Difficult to get in the door
- ◆ Little discretion in budgets
- ◆ Moneyed decision makers are elusive
- ◆ Risk aversion:
 - ◆ No experiments on \$10m wells.
 - ◆ No second chances.
- ◆ Technology push is difficult

Strategies to Overcome Disadvantages

- ◆ Alleviate customer pain (market pull)
- ◆ Engage marquee customers early
- ◆ Find a customer who will help with the costs
- ◆ Deliver on time and under budget
- ◆ Assemble a top tier management team
 - ◆ Match abilities with the market
 - ◆ Be prepared for effort required
 - ◆ Know the market
 - ◆ Be known in the market



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